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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,963	06/29/2001	Patrick McGill	41PR-7875	2593
23465	7590	04/29/2004	EXAMINER	
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			KIM, PAUL D	
			ART UNIT	PAPER NUMBER
			3729	
DATE MAILED: 04/29/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,963

Applicant(s)

MCGILL ET AL.

Examiner

Paul D Kim

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,7 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7 and 32-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/13/2004 has been entered.
2. Upon further consideration with amendment of claims 1 and 32, the 112 1st rejection is withdrawn hereby.

Drawings

3. The drawings are objected to because it is unclear as to be what the item "90" as shown in Fig. 4 is indicated. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 35 is objected to because of the following informalities: as per claim 35 the phrase "a spacer" as recited in lines 1-2 should be --the spacer--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Poling (US PAT. 4,351,105).

Poling teaches a process of making a control device comprising steps of: providing a hollow spacer (13) with at least one opening end and an access slot (adjacent to the hollow spacer as shown in Fig. 4 as per claim 32); providing a biasing member (117) including a front end and rear end as shown in Fig. 3; positioning the biasing member within the spacer that the spacer extends only around the biasing member; installing the biasing member and the spacer in a contact carrier (11) such that the biasing member front end receives and is mounted on a moving contact retaining boss (119) and the biasing member rear end receives and is mounted on a contact carrier mounting tab (a top portion of the 112) as shown in Fig. 3 (also see col. 9, line 11 to col. 10, line 50).

As per claim 35 the hollow spacer is a tubular spacer with at least one longitudinal opening as shown in Figs. 3 and 4.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 6, 7, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirata (US PAT. 4,063,054) in view of Poling (US PAT. 4,351,105).

Fig. 4a-4d of Hirata teaches a method for restricting travel of moving contact in a key switch comprising steps of: providing a spacer (13,14) having at least one opening and a biasing member (15) including a front end and rear end; positioning the biasing member within the spacer such that the spacer (13,14) extends only around the biasing member; and installing the biasing member and the spacer in a contact carrier (21). In Fig. 4a and 4d, Hirata shows that the biasing member is located within the spacer after the spacer is pressed and an access slot is a space between the spacer (13) and the contact carrier (21).

Re. Claim 2: Fig. 4d of Hirata shows the spacer having a length substantial equal to the compressed biasing member length.

Re. Claims 3 and 34: Fig. 4a and 4d of Hirata shows that the spacer engaging a moving contact (17) when the moving contact moves the safe travel distance (from a position of Fig. 4a to a position of Fig. 4d).

Re. Claim 6: Fig. 4a-4d of Hirata shows that the spacer aligns substantially parallel to a back of the moving contact.

Re. Claim 7: Fig. 4a-4d of Hirata shows that the movement of the moving contact is relative from a front wall (Fig. 4a) to a rear wall (Fig. 4d) of the contact carrier and a centerline axis of the contact.

Re. Claim 33: Fig. 4a-4d of Hirata shows that the spacer and the biasing member are positioned within the access slot of the switch.

However, Hirata does not teach a retaining boss of the moving contact and a mounting tab of the contact carrier. Poling teaches a process of making a control device including the biasing member (117) front end receives and is mounted on a moving contact retaining boss (119) and the biasing member (117) rear end receives and is mounted on a contact carrier mounting tab (a top portion of the 112) in order to response to the compressive force of range biasing member as shown in Fig. 3 (also see col. 9, line 11 to col. 10, line 50). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the moving contact and the contact carrier of Hirata by a retaining boss of the moving contact and a mounting tab of the contact carrier as taught by Poling in order to response to the compressive force of range biasing member, which is effective to pivotally return switch arm toward its open or at-rest position.

Response to Arguments

9. Applicant's arguments with respect to claims 1-3, 6, 7 and 32-35 have been considered but are moot in view of the new ground(s) of rejection. Rejections are based on the newly cited reference.

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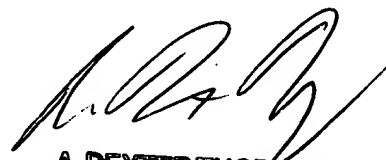
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 703-308-8356. The examiner can normally be reached on Tuesday-Friday between 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

pdk



**A. DEXTER TUGBANG
PRIMARY EXAMINER**